UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,167	09/13/2005	Heino Rehse	195.55	5032
22497 LARSON ANI	7590 10/10/2007 D.LARSON		EXAMINER	
11199 69TH STREET NORTH			PARK, EDWARD	
LARGO, FL 33773			ART UNIT	PAPER NUMBER
			2624	<del></del>
			MAIL DATE	DELIVERY MODE
		•	10/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Amplicant(a)			
	Application No.	Applicant(s)			
Office A-4i Comment	10/509,167	REHSE, HEINO			
Office Action Summary	Examiner	Art Unit			
	Edward Park	2624			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period or Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  136(a). In no event, however, may a reply be tir  will apply and will expire SIX (6) MONTHS from  e, cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on	·	·			
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.				
3) Since this application is in condition for allowa	nce except for formal matters, pro	osecution as to the merits is			
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.			
Disposition of Claims					
4) Claim(s) 4-6 is/are pending in the application.					
4a) Of the above claim(s) is/are withdra	wn from consideration.				
5) Claim(s) is/are allowed.		•			
6) Claim(s) <u>4-6</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	or election requirement.				
Application Papers					
9)⊠ The specification is objected to by the Examine	er.				
10)⊠ The drawing(s) filed on <u>27 September 2004</u> is/s	are: a)⊠ accepted or b)□ objec	cted to by the Examiner.			
Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correct		•			
11) The oath or declaration is objected to by the Ex	xaminer. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:		)-(d) or (f).			
1. Certified copies of the priority document					
<ul><li>2. ☐ Certified copies of the priority document</li><li>3. ☒ Copies of the certified copies of the priority</li></ul>	, ,				
3. Copies of the certified copies of the prio application from the International Burea	•	ed in this National Stage			
* See the attached detailed Office action for a list	, , ,	ed			
		<b>.</b>			
Attachment(s)	•				
1) Notice of References Cited (PTO-892)	4) Interview Summary				
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO/SB/08)</li> <li>Paper No(s)/Mail Date 1/18/05.</li> </ul>	Paper No(s)/Mail D 5) Notice of Informal F 6) Other:				

Application/Control Number: 10/509,167 Page 2

Art Unit: 2624

## **DETAILED ACTION**

## Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

## Claim Objections

2. Claim 4 is objected to because of the following informalities: The word "hermispherical" appears to contain a typographical error. Appropriate correction is required.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Peleg et al (WO 98/34195 A1).

Application/Control Number: 10/509,167

Art Unit: 2624

Regarding **claim 4**, Peleg teaches a method for inspecting channel pipes, wherein hemispherical or fully spherical digital images recorded at specific locations in the pipe are calculated and perspective images enabling virtual swiveling are produced, the method comprising:

taking a known geometry of an imaged pipe from an image data at one location (Peleg: figure 12a, b);

calculating and representing an intermediate image for a random neighboring location of a desired fictive camera position (Peleg: figure 12a, b);

projecting a recorded image computationally onto the known pipe geometry; and calculating a perspective image data resulting therefrom for a neighboring location (Peleg: figure 11, 12a, b).

Regarding **claim 5**, Peleg teaches calculating at each image point of a 2D-fisheye image P' (Xf, Yf) with known imaging function, the angle of incidence  $(\alpha, \theta)$  of the spherical coordinates, and from the calculation a corresponding image point in 3D space P (Xr, Yr, Zr) on the pipe surface is represented (Peleg: figure 11).

Regarding claim 6, Peleg teaches calculating from the desired fictive camera position and its viewing angle in space (Peleg: figure 11), an image point located in a desired section of an image plane (Peleg: figure 11), and taking from image point coordinates (Xb, Yb) of the image plane and assuming a projection center at a distance F from the image plane B (Peleg: figure 11), calculating corresponding image point coordinates (Xr, Yr, Zr) on the inner surface of the known pipe geometry and corresponding image point coordinates (Xf, Yf) of a fisheye image (Peleg:

Application/Control Number: 10/509,167 Page 4

Art Unit: 2624

figure 11), so that the color and brightness value of an image point on image plane B with Pn

(Xb, Yb) = P(Xf, Yf) is obtained (Peleg: pg. 26, lines 6-28).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Edward Park whose telephone number is (571) 270-1576. The

examiner can normally be reached on M-F 10:30 - 20:00, (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Brian Werner can be reached on (571) 272-7401. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Edward Park Examiner

Art Unit 2624

/Edward Park/

PERVISORY PATENT EXAMINER